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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/046,280

01/16/2002

Troy Delzer

2375

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7590

06/27/2006

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EXAMINER

ANDERSON, CATHARINE L

ART UNIT

PAPER NUMBER

3761

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/046,280	<b>Applicant(s)</b> DELZER ET AL.	
	<b>Examiner</b> C. Lynne Anderson	<b>Art Unit</b> 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) 34-58 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26 is/are allowed.
- 6) ☒ Claim(s) 1-25 and 27-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-25 and 27-33 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 7-25, and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ames et al. (6,543,106) in view of Klopfenstein et al. (4,100,984).

Ames discloses all aspects of the claimed invention but remains silent as to the portion of the apparatus that deposits the particulate matter. Ames discloses a forming jet assembly for depositing particulate matter into a supply of fibrous material, as shown in figure 1. The particulate matter is deposited from a device 120 having an outlet positioned above the supply of fibrous material 14, as shown in figure 1. The fibrous material is an opened tow of crimped fibers, as disclosed in column 5, lines 48-50.

Klopfenstein teaches the use of a feed tray 2 for distributing particulate matter, as shown in figure 1. When a motor 3 vibrates the feed tray 2, particulate matter is deposited, and when the feed tray 2 is not vibrated, substantially no particulate matter is deposited, as disclosed in column 4, lines 37-42. The use of the vibrating feed tray

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provides precision in the depositing of the particulate matter, as disclosed in column 4, lines 33-52.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the apparatus of Ames with a vibrating feed tray, as taught by Klopfenstein, to provide the apparatus with precision in depositing the particulate matter.

With respect to claim 2, the particulate matter comprises superabsorbent polymer, as disclosed in column 7, lines 13-15.

With respect to claims 7-9, Ames, as modified by Klopfenstein, fails to disclose the flow rate of particulate matter. It would have been obvious to one of ordinary skill in the art at the time of invention to deposit the particulate matter at a flow rate of about 10,000 g/min to about 20,000 g/min, since it has been held that where the general conditions of the claim (i.e. the depositing of particulate matter into a fibrous material) are disclosed in the prior art, finding the optimum or workable ranges involves only routine skill in the art.

With respect to claim 10, the motor 3 is an electric vibrator.

With respect to claims 11-16, Ames, as modified by Klopfenstein, fails to disclose the frequency and pitch at which the motor vibrates. It would have been obvious to one of ordinary skill in the art at the time of invention for the motor to vibrate at a frequency of up to about 600 Hz and at a pitch of about 0.01 to about 0.125 inches, since it has been held that where the general conditions of the claim (i.e. the depositing of

particulate matter into a fibrous material) are disclosed in the prior art, finding the optimum or workable ranges involves only routine skill in the art.

With respect to claim 17, increasing or decreasing the frequency of vibration inherently increases or decreases the amount of particulate matter deposited.

With respect to claim 18, Klopfenstein discloses a gate 12, as shown in figure 1.

With respect to claim 19, the pan 2 is covered, as shown in figure 1.

With respect to claim 20, the gate 12 is adjustable, as disclosed in column 4, lines 31-36.

With respect to claims 21-23, Ames, as modified by Klopfenstein, fails to disclose the distance from the gate to the pan. It would have been obvious to one of ordinary skill in the art at the time of invention for the gate to be spaced apart from the pan by about 0.10 to about 1.0 inches, since it has been held that where the general conditions of the claim (i.e. the depositing of particulate matter into a fibrous material) are disclosed in the prior art, finding the optimum or workable ranges involves only routine skill in the art.

With respect to claims 24-25, the pan 2 comprises contoured sides that function to control the flow path of the particulate matter, as shown in figure 1.

With respect to claims 31-33, Ames, as modified by Klopfenstein, fails to disclose the active width of the feed tray. It would have been obvious to one of ordinary skill in the art at the time of invention for the feed tray to have an active width of about 2 to about 12 inches, since it has been held that where the general conditions of the claim

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(i.e. the depositing of particulate matter into a fibrous material) are disclosed in the prior art, finding the optimum or workable ranges involves only routine skill in the art.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ames et al. (6,543,106) in view of Klopfenstein et al. (4,100,984), as applied to claim 1 above, and further in view of Chmielewski (6,632,209).

Ames, as modified by Klopfenstein, discloses all aspects of the claimed invention with the exception of cellulose acetate.

Chmielewski teaches the use of opened tow of cellulose acetate in the absorbent core of an absorbent article because cellulose acetate provides improved wicking and absorbing capabilities, as disclosed in column 8, lines 54-59.

It would therefore be obvious to one of ordinary skill in the art at the time of invention for the opened tow fibrous material of Ames to comprise opened tow of cellulose acetate, as taught by Chmielewski, to provide improved wicking and absorbing capabilities.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ames et al. (6,543,106) in view of Klopfenstein et al. (4,100,984), as applied to claim 1 above, and further in view of Hansen (5,807,364).

Ames, as modified by Klopfenstein, discloses all aspects of the claimed invention with the exception of the fibrous material comprising 10-70% and the particulate matter comprising 30-95%.

Hansen discloses an absorbent composite comprising between 0.05% and 80% particulate matter, as disclosed in column 14, lines 36-44. Hansen further discloses that when the particulate matter is superabsorbent, the superabsorbent is preferably added in the amount of 3-70%, as disclosed in column 14, lines 41-43, to provide suitable absorbency to the composite.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to provide the superabsorbent particulate matter of Ames in the amount of 3-70%, as taught by Hansen, to provide suitable absorbency.

Claims 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ames et al. (6,543,106) in view of Klopfenstein et al. (4,100,984), as applied to claim 1 above, and further in view of Jackson et al. (5,952,251).

Ames, as modified by Klopfenstein, discloses all aspects of the claimed invention with the exception of a vacuum draw roll located about 0.25 to about 4 inches from the outlet.

Jackson teaches the use of a vacuum draw roll in the formation of a fibrous web for an absorbent article, as disclosed in column 14, lines 30-47, to support and form the fibrous web.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to provide the apparatus of Ames with a vacuum roll, as taught by Jackson, to support and form the fibrous material.

With respect to claims 28-30, it would have been obvious to one of ordinary skill in the art at the time of invention for the outlet to be located about 0.25 to about 4 inches from the vacuum roll, since it has been held that where the general conditions of the claim (i.e. the depositing of particulate matter into a fibrous material) are disclosed in the prior art, finding the optimum or workable ranges involves only routine skill in the art.

***Allowable Subject Matter***

Claim 26 is allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to disclose the claimed invention. Specifically, the prior art of record fails to disclose two or more side plates on the side of the feed tray to inhibit the passage of air. The inhibition of air allows the particulate matter to be more evenly distributed, as disclosed on page 41 of the instant specification.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any



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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (571) 272-4932. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CWA  
cla  
June 22, 2006

TATYANA ZALUKAEVA  
SUPERVISORY PRIMARY EXAMINER

